

REPLACEMENT SHEET

1/15

FIG. 1

Sequence	MB DNA (%)	EC DNA (%)	fold (MB/EC)
GCGGCC=	0.1462	0.0020	73.12
GCCGGC=	0.2317	0.0062	37.19
GTCGAC=	0.0390	0.0116	8.56
CTCGAG=	0.0299	0.0038	7.96
CCCGGG=	0.0645	0.0091	7.13
CACGTG=	0.0205	0.0030	6.74
CCCGAG=	0.0451	0.0069	6.58
CTCGGG=	0.0392	0.0068	5.75
GCCGAC=	0.1435	0.0297	4.83
GTCGGC=	0.1400	0.0295	4.74
CTCGGC=	0.1021	0.0217	4.71
GCCGAG=	0.1000	0.0218	4.58
GACGAG=	0.0493	0.0120	4.10
GCCGCG=	0.1781	0.0435	4.09
GACGTC=	0.0619	0.0151	4.09
GTCGAG=	0.0677	0.0166	4.08
GTCGTC=	0.0755	0.0192	3.93
CTCGAC=	0.0643	0.0165	3.90
CCCGAC=	0.0676	0.0175	3.86
CTCGTC=	0.0601	0.0130	3.86
CGCGGC=	0.1751	0.0455	3.85
GTCGGG=	0.0627	0.0165	3.79
TCCGAG=	0.0203	0.0054	3.78
GACGAC=	0.0747	0.0199	3.76
CTCGGA=	0.0202	0.0054	3.73
GCCGCC=	0.2336	0.0654	3.58
GCCGTC=	0.1008	0.0296	3.41
GGCGGC=	0.2237	0.0662	3.38
GCCGGT=	0.1302	0.0402	3.24
CCCGGC=	0.1183	0.0365	3.24
GACGGC=	0.1033	0.0327	3.16
CCCGCG=	0.0824	0.0263	3.13
GCCGGG=	0.1185	0.0373	3.13
CGCGGG=	0.0849	0.0273	3.11
ACCGGC=	0.1242	0.0405	3.07
GGCGGG=	0.0862	0.0323	3.04
CCCGCC=	0.0895	0.0329	3.02
CGCGGT=	0.1117	0.0372	3.00
ACCGCG=	0.1090	0.0368	2.97
ACCGAG=	0.0511	0.0175	2.92
GTCGGA=	0.0331	0.0118	2.80
GGCGAC=	0.1005	0.0360	2.80
CTCGGT=	0.0494	0.0178	2.78
GTCGCC=	0.1056	0.0383	2.76
GTCGCG=	0.0884	0.0323	2.74
CACGTC=	0.0430	0.0158	2.73
TCCGAC=	0.0326	0.0121	2.70
CGCGAC=	0.0852	0.0320	2.66
<hr/>			
Average	0.0498	0.0288	
Sum	12.7440	7.3665	

REPLACEMENT SHEET

2/15
FIG. 2

a)

SEQUENCE ID No.:			
MB-ODN 4/5 (-CGXXCGXXXCG-)			16
No.	Sequence	Score	
1	CTCCAcgGGcgGCAcgGCCA	11811	17
2	TGCTcTcgGGcgGCAcgGTTG	11773	18
3	CAGGcgGTCcgGCTcgATGG	11538	19
4	AAC TGcgGAcgTGcgGCGAG	10931	20
5	GTCAGcgGAcgTGcgGCTC	10829	21
6	AAGGcgTGcgGGTcgGCCC	10697	22
7	CTCAGcgGGcgGCAcgTGCA	10670	23
8	CACACcgGGcgCCTcgGCTT	10319	24
9	ATGAAcgGGcgGCTcgAGCC	10240	25
10	GATGcgGAcgGCAcgCCCA	10199	26
11	CAGCcgGTCcgTGcgGCAT	9962	27
12	GGTGcgGGcgAGGcgATTG	9855	28
13	TGTTcgGTCcgGCTcgGCGG	9839	29
14	GGTGcgGTCcgAGGcgCTCT	9728	30
15	GGTGcgGTCcgCCTcgGCCC	9259	31
16	GGGGcgGTCcgCCTcgCTAA	9250	32
17	GACATcgGTCcgGCAcgTCAG	9098	33
18	CCAGTcgGGcgGGGcgCTGG	9022	34
19	TCTGcgGTCcgAAGcgGCCC	8953	35
20	CAACTcgATcgGGGcgCCCA	8878	36
21	TTTGcgGTCcgGTGcgCAGC	8869	37
22	CCAGGcgGTCcgGTGcgCAGG	8869	38
23	CTCCTcgGTCcgAGGcgGTGG	8844	39
24	ACCATcgGGcgGCCcgTCTC	8780	40
25	CAACAcgATcgTGTcgGCTG	8615	41
393	GTGTTcgAAcgCTAcgAACCC	1681	42
394	AAGTAcgAAcgATGcgAGAA	1637	43
395	ACTAGcgTAcgCAGcgAATC	1539	44

b)

SEQUENCE ID No.:			
MB-ODN 5/5 (-CGXXXCGXXXCG-)			45
No.	Sequence	Score	
1	TGCTcTcgTGcgGCTcgGCGG	12868	46
2	GAGGcgGCTcgGTGcgGGTC	12599	47
3	TTGGcgGCAcgCAAcgCCTC	11345	48
4	GAGGcgTTGcgGGGcgGCCC	11280	49
5	AAGGcgTGcgGCTcgTGGA	11258	50
6	CAGGcgATGcgCCTcgGCTC	10614	51
7	GTTCcgGGcgAGTcgGCAT	10297	52
8	GGGGcgGGTcgACTcgACCA	10243	53
9	TGGTcgGGGcgGGTcgACTC	10153	54
10	ATCAGcgCTAcgGGGcgGCCA	10063	55
11	GTGGcgCCAcgAGTcgACAT	10059	56
12	AAGGcgGCTcgCATcgATGG	10036	57
13	GAGGcgGGGcgGGTcgATCT	9743	58
14	AATTcgTGcgGCTcgTGCA	9712	59
15	CAGGcgGTGcgGTGcgGCAT	9657	60
16	TAGGcgCTTcgAGTcgGCAC	9655	61
17	GTGAcgTCAcgGGTcgGCGG	9390	62
18	GCTTcgAGTcgGCAcgCCAG	9269	63
19	GTGTCgGGGcgAGGcgACCA	9164	64
20	TTGGcgTTGcgTGTcgGCCT	9034	65
21	TCACTcgATGcgGGGcgCCAC	8959	66
22	GAGGcgGGGcgGGGcgGAGA	8873	67
23	TAGGcgATGcgCAGcgCCTG	8845	68
24	CAGGcgGTGcgGCAcgCAGT	8703	69
25	CTGAcgCCTcgGCTcgAGCT	8642	70
392	ATTAcgCTGcgAAAcgCAGT	1807	71
393	TAAAcgGAAcgTAAcgATCC	1713	72
394	CATGcgTAAcgTTAcgGAAA	1219	73

REPLACEMENT SHEET

3/15

FIG. 3

a)

b)

SEQUENCE ID No.:
MB-ODN 4/5 (-CGXXCGXXCG-) 74

ODN	Sequence	
MB-ODN4/5-1	CCAGTCGGCGCGCGCGCTGC	75
MB-ODN4/5-2	GCTGGCGCGCGCGCGATTC	76
MB-ODN4/5-3	ACCAGCGCGCGCGCTCGCTC	77
MB-ODN4/5-4	GCTGGCGCGCGCTCGCGATC	78
MB-ODN4/5-5	GGCAGCGCGCGCGATCGCGAC	79
MB-ODN4/5-6	CTTGGCGCGCGCTCGCGACA	80
MB-ODN4/5-7	AACTGGCGCGCTCGCGCGAC	81
MB-ODN4/5-8	GCTCAGCGCTCGCGATCGATTC	82
MB-ODN4/5-9	TTTGGCGCGCTCGCTCGCGAC	83
MB-ODN4/5-10	GCTGGCGCTCGAGCGCGCTCT	84
MB-ODN4/5-11	GCTGGCGCTCGAGCGCGCTCT	85
MB-ODN4/5-12	TTTGTGGCTCGCAACGAAAA	86
MB-ODN4/5-13	GAATCGAGCGCGATCGCGAC	87
MB-ODN4/5-14	TTGCTCGAGCGGTTCGGCAT	88
MB-ODN4/5-15	TTGCTCGAGCGGTTCGGCTC	89
MB-ODN4/5-16	AGCATCGAGCGCGACCGTGGT	90
MB-ODN4/5-17	GGCAGCGAGCGCGAACGACAC	91
MB-ODN4/5-18	CTCATCGAGCGCGACCGCGAC	92
MB-ODN4/5-19	ATGCTCGAGCGCGCTCGCGTC	93
MB-ODN4/5-20	GGCTTCGAAACGGCTCGAGGG	94
MB-ODN4/5-21	GAATCGCGAACGTCAGCTCAT	95
MB-ODN4/5-22	CTTGTGGAACGTCCTCGCGCA	96
MB-ODN4/5-23	GACATCGAAACGCTTCGACAC	97
MB-ODN4/5-24	CAGTTCCGATCGAGACGACCC	98
MB-ODN4/5-25	GTAGCGCATCGATCGCGCGAA	99
MB-ODN4/5-26	CACACGATCGTGTGGGCTC	100
MB-ODN4/5-27	CTAGCGCATCGCGAACGAGT	101
MB-ODN4/5-28	CCACACGATCGCGACGGTGG	102
MB-ODN4/5-29	GGCAGCGTGGCTGACGACCTT	103
MB-ODN4/5-30	TAAAGCGTGGCGATCGCATAT	104
MB-ODN4/5-31	AGCAGCGTTCTGTCTGGGCT	105
MB-ODN4/5-32	TGTTGGCGACGGTGGGCTGC	106
MB-ODN4/5-33	CTGGCGCGACGGGACGGTGG	107
MB-ODN4/5-34	GGCAGCGCGACGGGACGGGAC	108
MB-ODN4/5-35	GCAGCGCGCTCGTCAAGCCCC	109

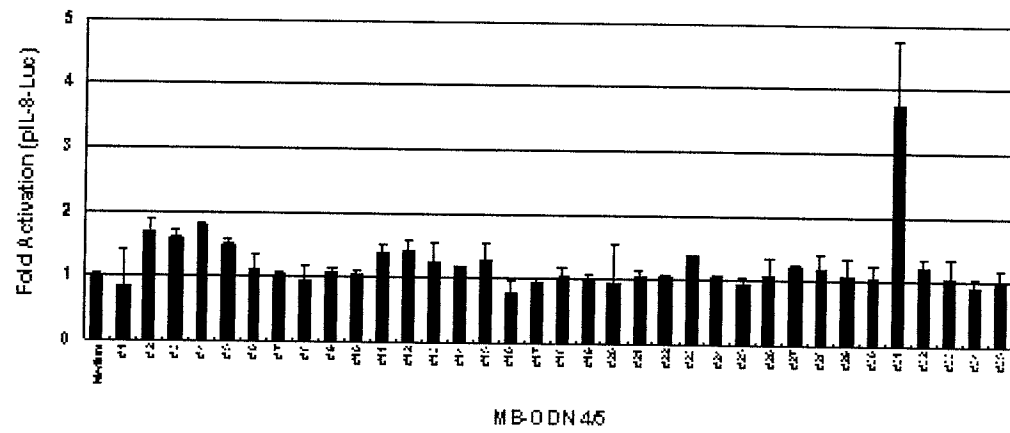
SEQUENCE ID No.:
MB-ODN 5/5 (-CGXXXCGXXXCG-) 110

ODN	Sequence	
MB-ODN5/5-1	GATCGCGATCGGTGGGCTGC	111
MB-ODN5/5-2	CAGCGCGTCCGCAACGGCTC	112
MB-ODN5/5-3	GATCGCGTCCGCAATCGCGAA	113
MB-ODN5/5-4	CAGCGCGTCCGCGACGCTGCT	114
MB-ODN5/5-5	CGAGCGCGTCCGCGACGACAA	115
MB-ODN5/5-6	TGGTCGAGCGGTTCGGGAC	116
MB-ODN5/5-7	ACAGCGATCTCGTGGCGCAC	117
MB-ODN5/5-8	TAGCGCAACCGATCGCGGCTC	118
MB-ODN5/5-9	TCAAGCAACCGGTTCGGCGCA	119
MB-ODN5/5-10	ATCTCGAAACGGTTCGGAGGG	120
MB-ODN5/5-11	GGGTTCGAATCGGTCTCGGCTC	121
MB-ODN5/5-12	TAGCGCATCGCGACGGGCTC	122
MB-ODN5/5-13	ATGCGCATCGCGTTCGGCTC	123
MB-ODN5/5-14	CGGTTCGACACGCTTCGGATTC	124
MB-ODN5/5-15	TGCTCGTGGGCGCTCGCGAC	125
MB-ODN5/5-16	CCAGCGTGGCGATCGCGGCA	126
MB-ODN5/5-17	GCATCGTGGCGAACGGCATTC	127
MB-ODN5/5-18	TGGACGTCTCGTACCGCGAC	128
MB-ODN5/5-19	CTGGCGTACGGCTCTCGGCTT	129
MB-ODN5/5-20	TTGGCGTTGGCTCTCGGCTT	130
MB-ODN5/5-21	AAATCGTTTCGGCGACGGCAT	131
MB-ODN5/5-22	ATCACGTTCGGCGACGGGCTC	132
MB-ODN5/5-23	AAATCGTCTCGAGCGGTTCC	133
MB-ODN5/5-24	CTGGCGCAACGCTGGCGGTTC	134
MB-ODN5/5-25	TGGCGCGACCGCGACGGCTAT	135
MB-ODN5/5-26	TCTGGCGACCGCATCGTTCA	136
MB-ODN5/5-27	TGGCGCGACCGCTTACGAACT	137
MB-ODN5/5-28	GCTTCGCAACGCGACGTTTC	138
MB-ODN5/5-29	TTCGGCGAACCGCATCGCGCA	139
MB-ODN5/5-30	GCGCGCGAACGTTTCGGCATC	140
MB-ODN5/5-31	ACAGCGCATCGCATCGAGCA	141
MB-ODN5/5-32	AGCAGCGTTCGGGTCTGTAC	142
MB-ODN5/5-33	ACTGGCGTTCGGCGACGAGCC	143
MB-ODN5/5-34	GTCTCGCTTCGGCGACGGGCT	144
MB-ODN5/5-35	GGGACCGTTCGCTACGCTGCT	145
MB-ODN5/5-36	CTGACCGCTTCGGCTCGAGCT	146

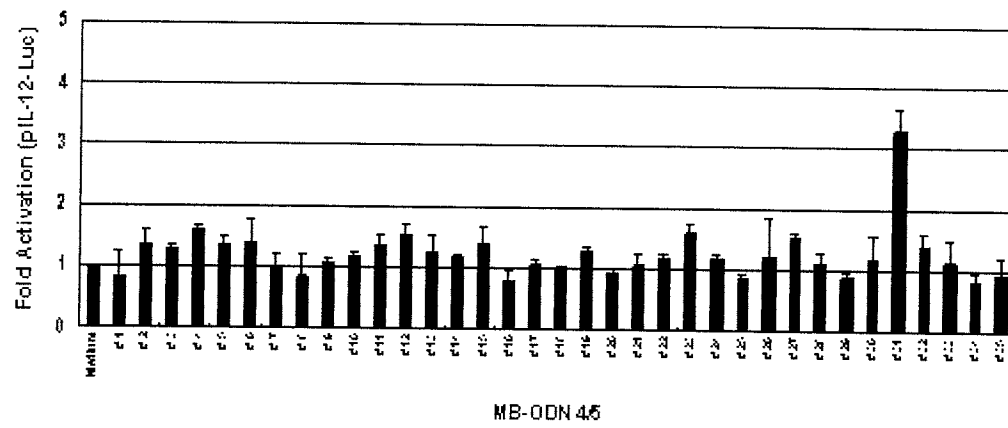
REPLACEMENT SHEET

4/15
FIG. 4

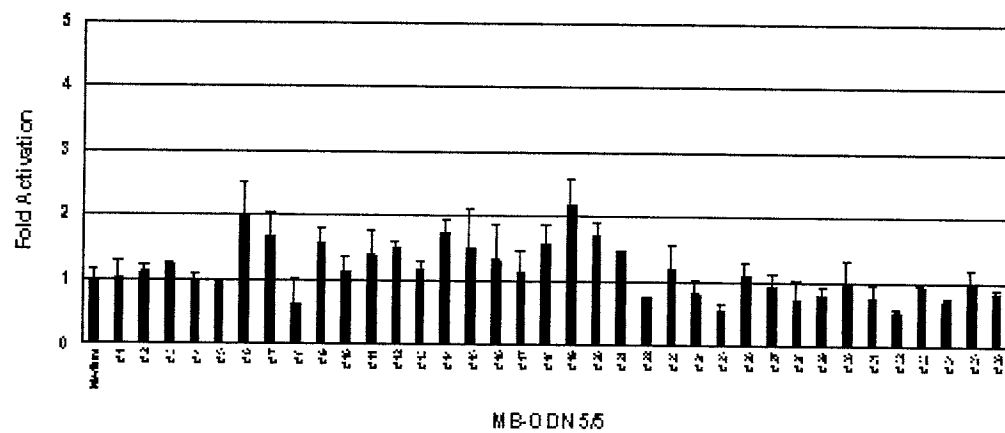
a)



b)



c)



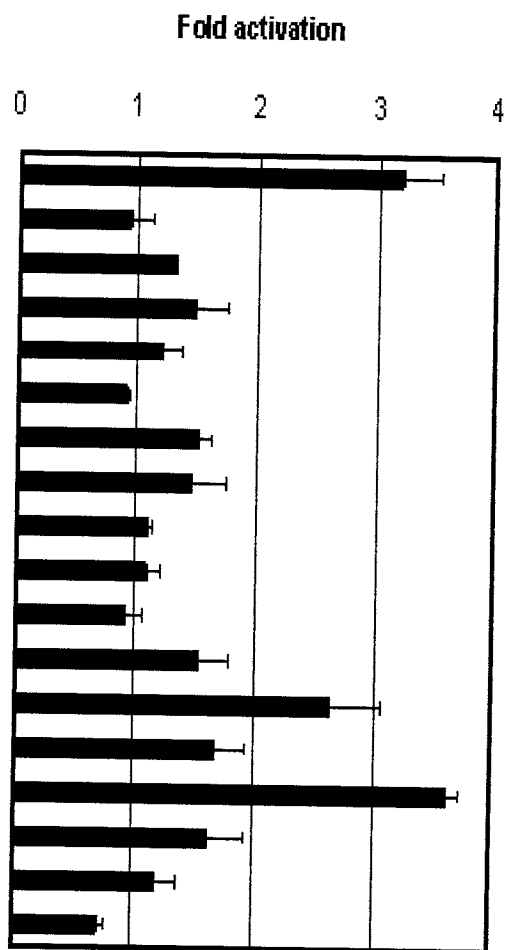
REPLACEMENT SHEET

5/15
FIG. 5

a)

SEQUENCE ID No.:		
ODN	Sequence	
MB 4/5 #31	AGCAGCGTTCGTGTCGGCCT	147
#31.1	CAGCTCGTTCGTGTCGTGCT	148
#31.2	TGTGGCGTTCGTGTCGGTCT	149
#31.3	TGCACCGTTCGTGTCGCCAC	150
#31.4	GGCCACGTTCGTGTCGGTAG	151
#31.5	GAACACGTTCGTGTCGGAAC	152
#31.6	CAGCACGTTCGTGTCGGACA	153
#31.7	TATGTCGTTCGTGTCGTCCT	154
#31.8	AAGGGCGTTCGTGTCGCTTG	155
#31.9	ATTGCGTTCGTGTCGATTC	156
#31.10	GGTGGCGTTCGTGTCGTCCT	157
#31.11	ATGGGCGTTCGTGTCGATCC	158
#31.12	GTATTCGTTCGTGTCGTCCT	159
#31.13	GGGACGTTCGTGTCGGTGC	160
#31.14	TGACTCGTTCGTGTCGCATG	161
#31.15	GTCATCGTTCGTGTCGAGAC	162
#31.16	TTGCACGTTCGTGTCGATGA	163
#31.17	CAGCACGTTCGTGTCGGTCA	164

b)



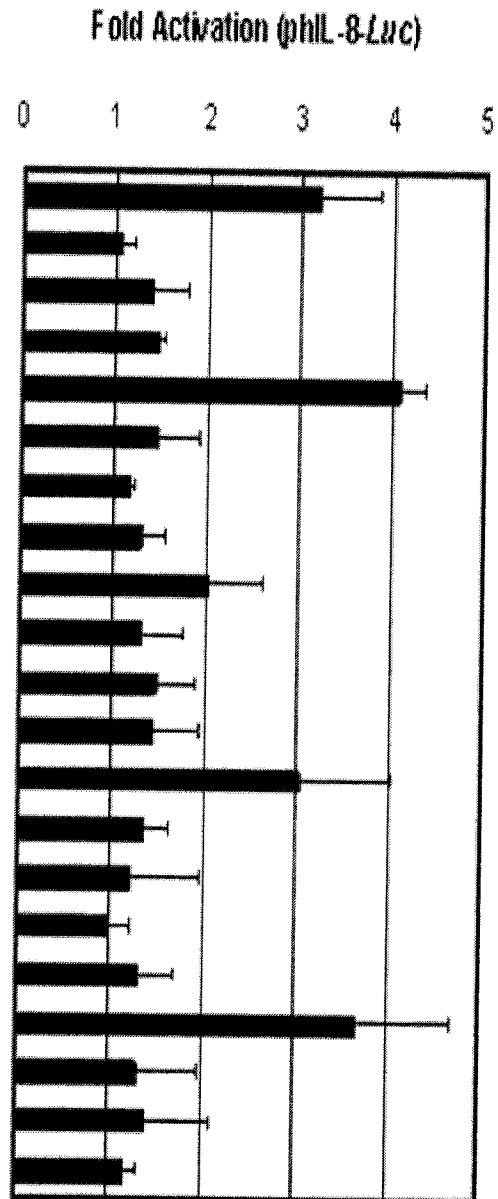
REPLACEMENT SHEET

6/15
FIG. 6

a)

SEQUENCE ID No.:		
ODN	Sequence	
MB-ODN 31(O)	AGCAGCGTTCTGTCTCGGCCT	165
MB-ODN 31(M)	AGCGTTCTGTCTCGGC	166
#31-CG-1	AGCAGCGTTCTGTCTCGGCCT	167
#31-CG-2	AGCAGCGTTCTGTCTCGGCCT	168
#31-CG-3	AGCAGCGTTCTGTCTCGGCCT	169
#31-CG-4	AGCAGCGTTCTGTCTCGGCCT	170
#31-CG-5	AGCAGCGTTCTGTCTCGGCCT	171
#31-CG-6	AGCAGCGTTCTGTCTCGGCCT	172
#31-CG-7	AGCAGCGTTCTGTCTCGGCCT	173
#31-A-1	AGCAGCGTTCTGTCTCGGCCT	174
#31-A-2	AGCAGCGTTCTGTCTCGGCCT	175
#31-A-3	AGCAGCGTTCTGTCTCGGCCT	176
#31-B-1	AGCAGCGTTCTGTCTCGGCCT	177
#31-B-2	AGCAGCGTTCTGTCTCGGCCT	178
#31-B-3	AGCAGCGTTCTGTCTCGGCCT	179
#31-C-1	AGCAGCGTTCTGTCTCGGCCT	180
#31-C-2	AGCAGCGTTCTGTCTCGGCCT	181
#31-C-3	AGCAGCGTTCTGTCTCGGCCT	182
#31-D-1	AGCAGCGTTCTGTCTCGGCCT	183
#31-D-2	AGCAGCGTTCTGTCTCGGCCT	184
#31-D-3	AGCAGCGTTCTGTCTCGGCCT	185

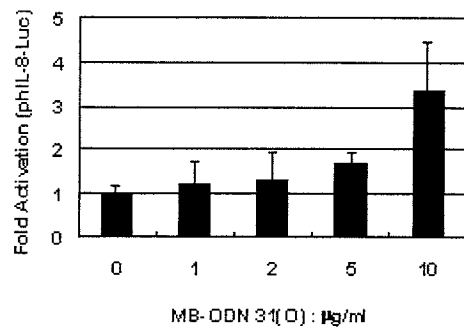
b)



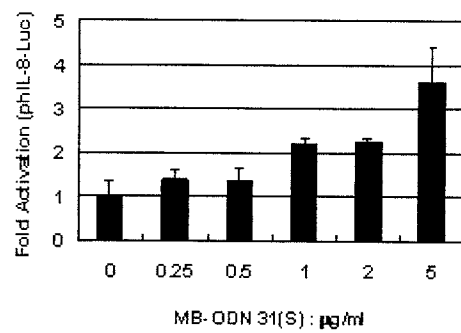
REPLACEMENT SHEET

7/15
FIG. 7

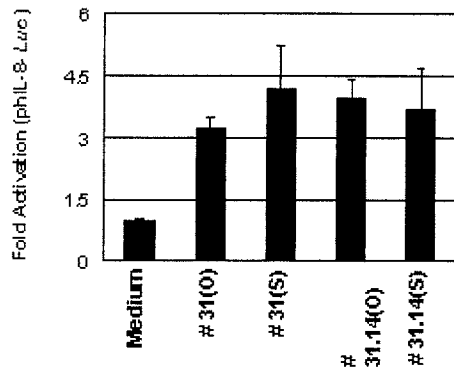
a)



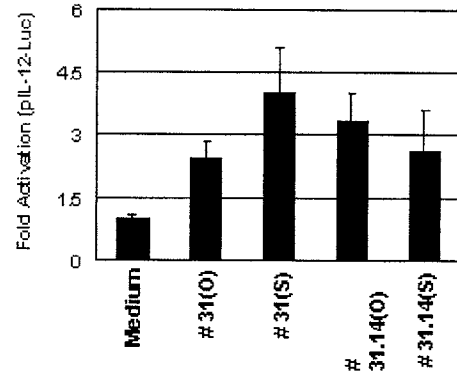
b)



c)



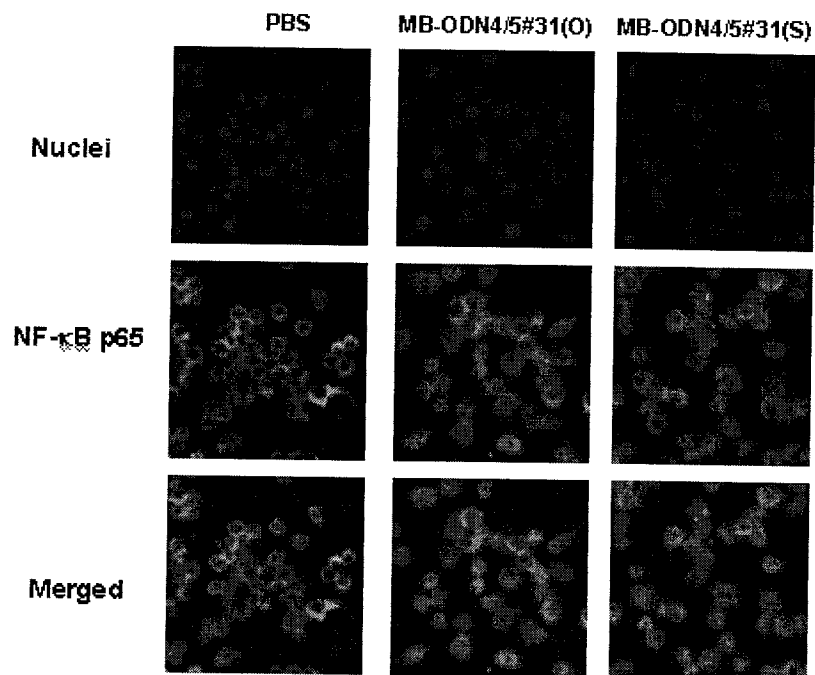
d)



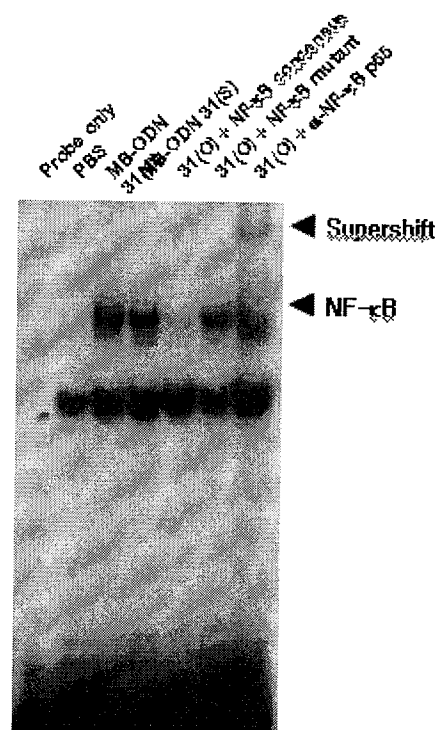
REPLACEMENT SHEET

8/15
FIG. 8

a)



b)



REPLACEMENT SHEET

9/15

FIG. 9

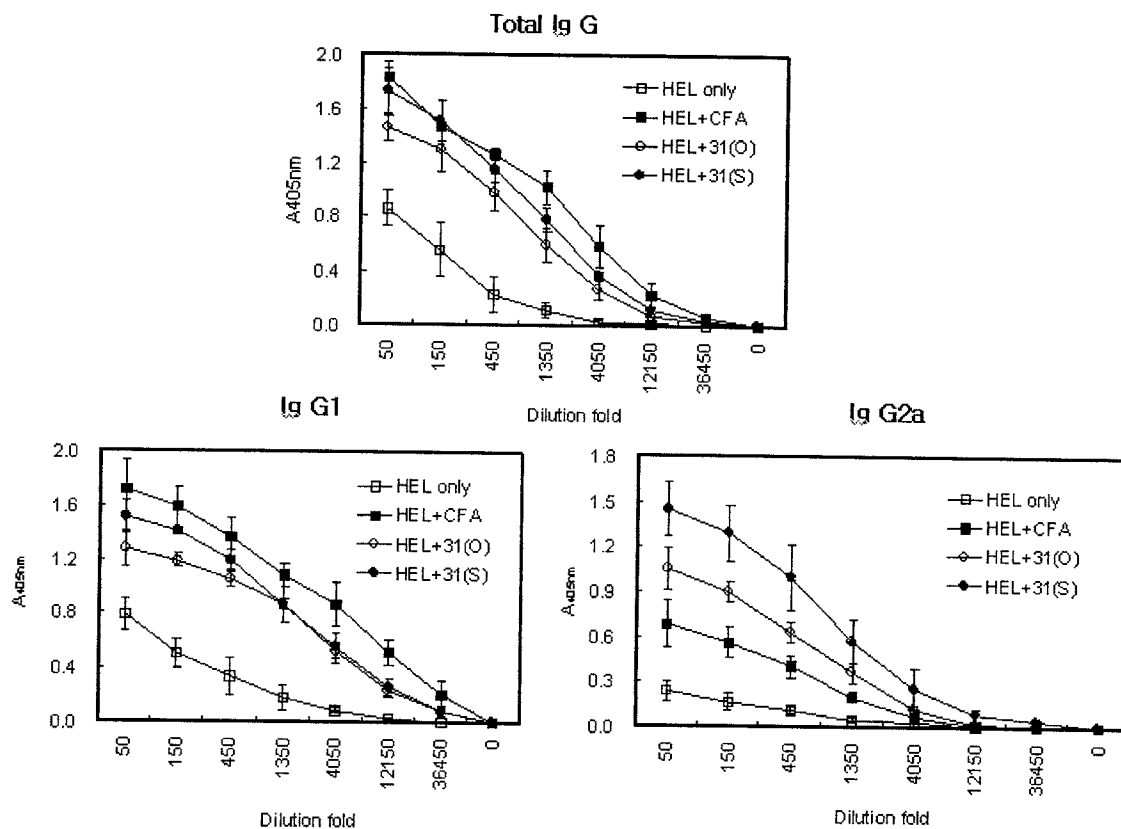
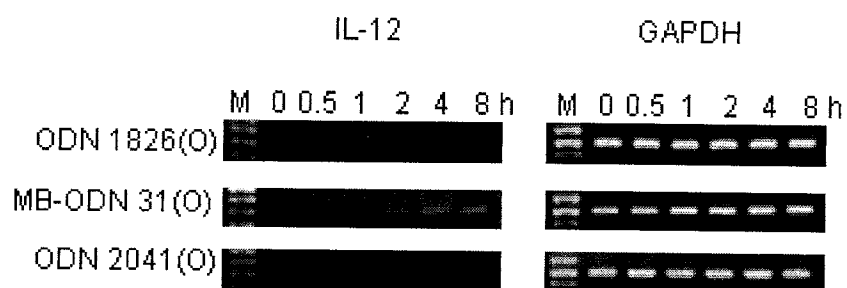


FIG. 10



10/15
FIG. 11

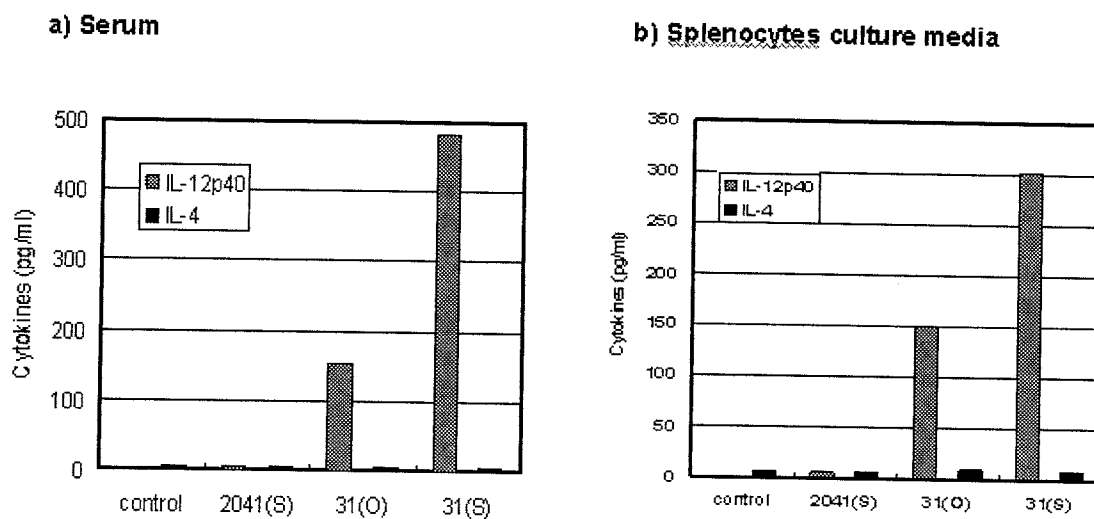
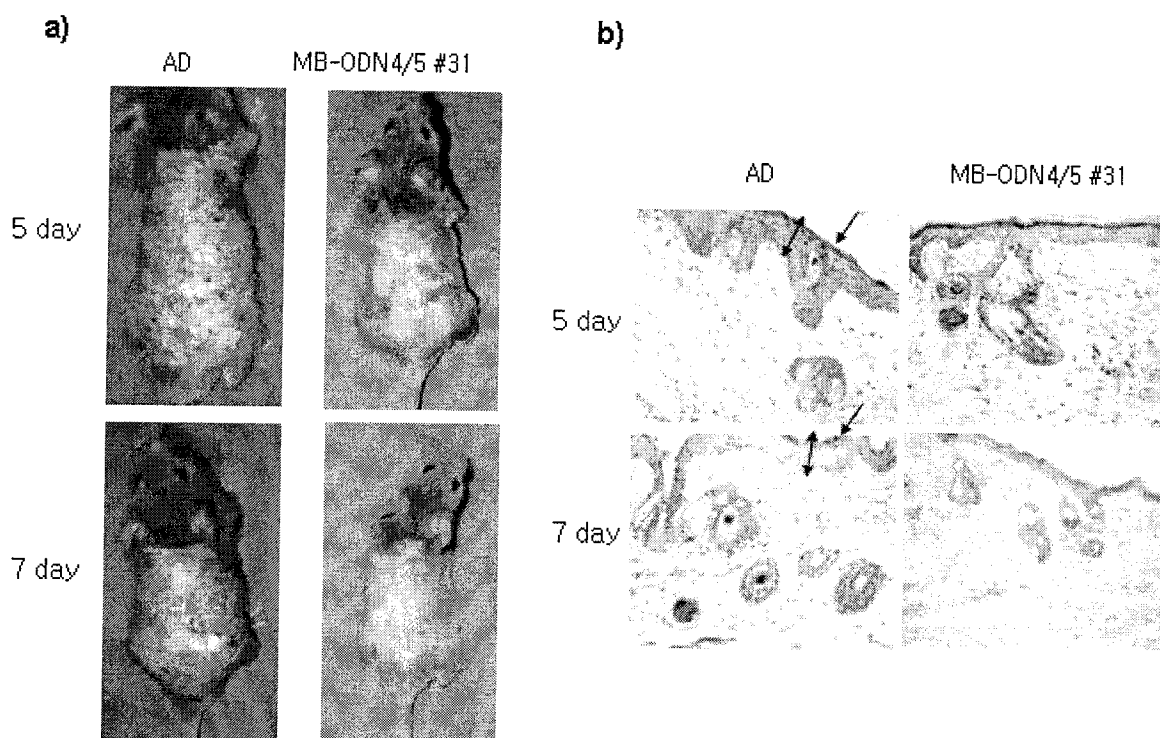


FIG. 12



REPLACEMENT SHEET

11/15
FIG. 13

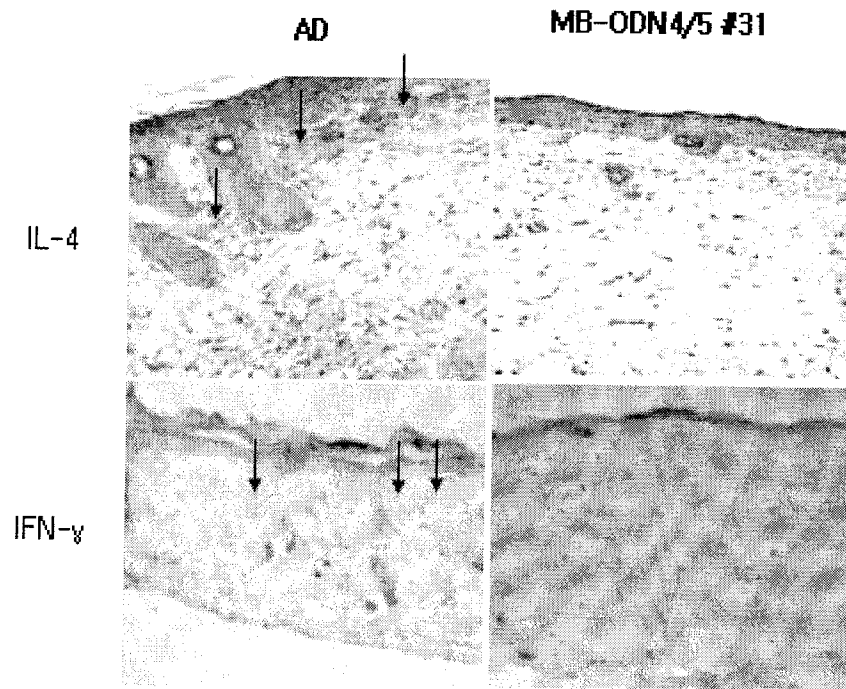
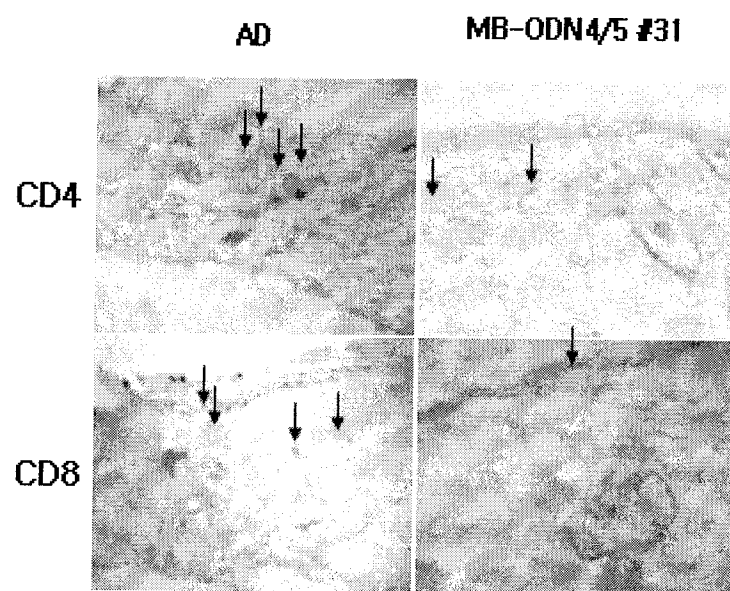


FIG. 14



REPLACEMENT SHEET

12/15
FIG. 15

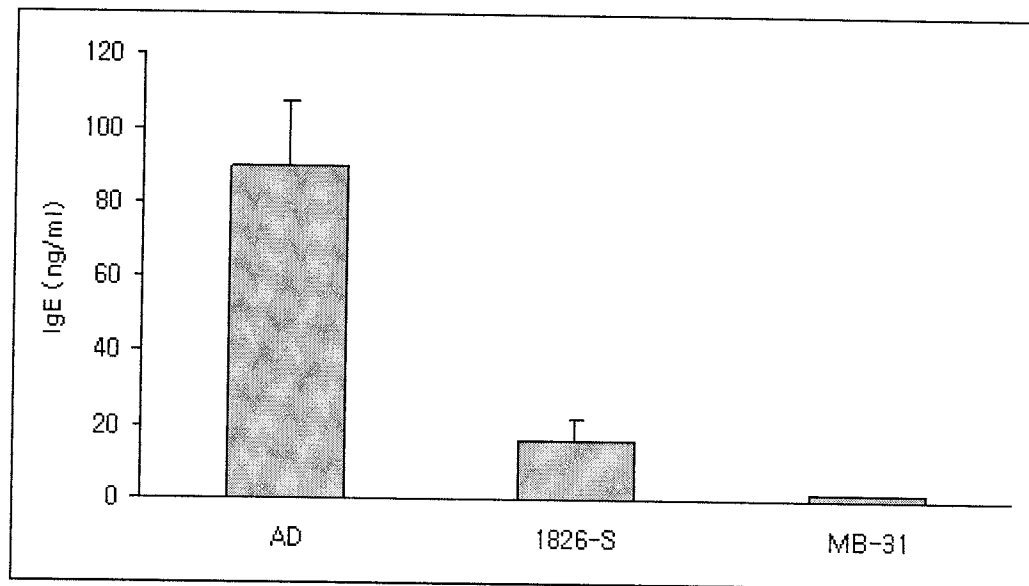
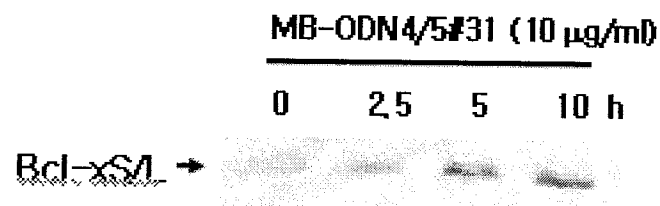


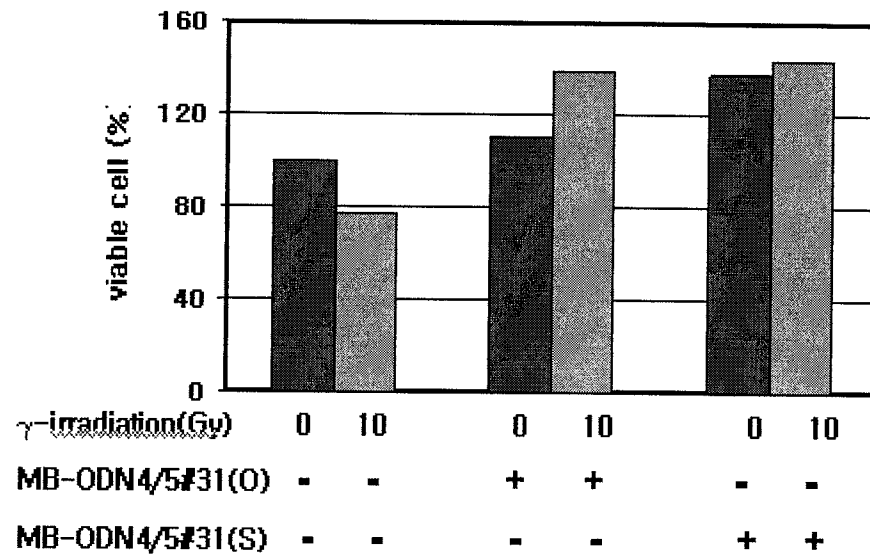
FIG. 16



REPLACEMENT SHEET

13/15
FIG. 17

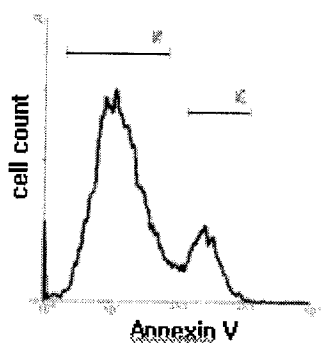
MTT assay



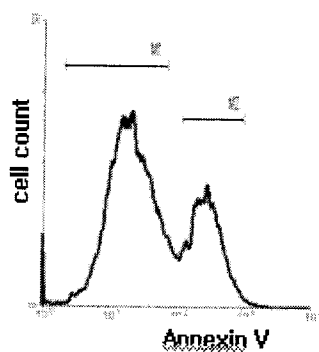
REPLACEMENT SHEET

14/15
FIG. 18

A) Control, 0 Gy



B) Control, 10 Gy



C) MB-ODN4/5#31(S), 10Gy

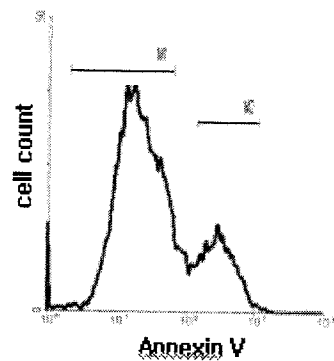
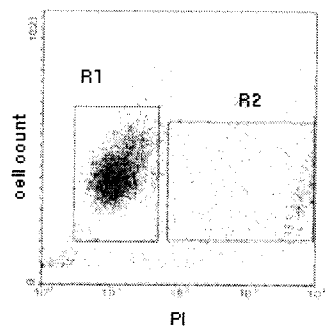


Fig.	γ -irradiation	MB-ODN 4/5 #31(S)	Marker	%Total
A	0 Gy	(-)	M1	73,54
			M2	16,709
B	10 Gy	(-)	M1	58,82
			M2	27,24
C	10 Gy	(+))	M1	65,25
			M2	18,71

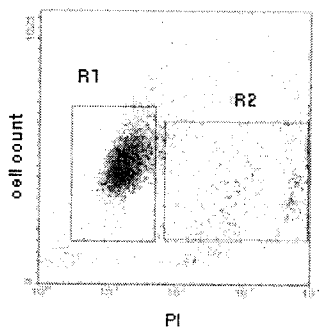
REPLACEMENT SHEET

15/15
FIG. 19

A) Control, 0 Gy



B) Control, 10 Gy



C) MB-ODN4/5#31(S), 10Gy

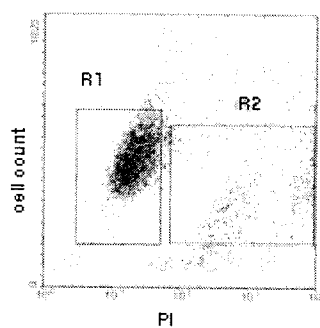


Fig.	γ - irradiation	MB-ODN 4/5 #31(s)	Region	%Total
A	0 Gy	(-)	R1 R2	73,30 16,32
B	10 Gy	(-)	R1 R2	58,93 25,33
C	10 Gy	(+)	R1 R2	62,82 20,92